

D. LUKTON

#10

1653

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/341,590

DATE: 05/18/2000  
TIME: 14:11:46

Input Set : A:\Larsen.app  
Output Set: N:\CRF3\05182000\I341590.raw

BS

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3 <110> APPLICANT: Larsen, Bjarne Due  
5 <120> TITLE OF INVENTION: PHARMACOLOGICALLY ACTIVE PEPTIDE CONJUGATES HAVING A  
6 REDUCED TENDENCY TOWARDS ENZYMATIC HYDROLYSIS  
8 <130> FILE REFERENCE: PPT-20479-US  
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/341,590  
C--> 11 <141> CURRENT FILING DATE: 1999-07-03  
13 <150> PRIOR APPLICATION NUMBER: DK 0317/98  
14 <151> PRIOR FILING DATE: 1998-03-09  
16 <160> NUMBER OF SEQ ID NOS: 121  
18 <170> SOFTWARE: PatentIn Ver. 2.0  
20 <210> SEQ ID NO: 1  
21 <211> LENGTH: 5  
22 <212> TYPE: PRT  
23 <213> ORGANISM: Artificial Sequence  
25 <220> FEATURE:  
26 <223> OTHER INFORMATION: Description of Artificial Sequence: DPLCE  
28 <220> FEATURE:  
29 <221> NAME/KEY: MOD\_RES  
30 <222> LOCATION: (2)  
31 <223> OTHER INFORMATION: D-Pen  
33 <400> SEQUENCE: 1  
OK 34 Tyr Xaa Gly Phe Cys  
35 1 5  
38 <210> SEQ ID NO: 2  
39 <211> LENGTH: 8  
40 <212> TYPE: PRT  
41 <213> ORGANISM: Artificial Sequence  
43 <220> FEATURE:  
44 <223> OTHER INFORMATION: Description of Artificial Sequence: DPLCE-Arg-Pro-Ala  
46 <220> FEATURE:  
47 <221> NAME/KEY: MOD\_RES  
48 <222> LOCATION: (2)  
49 <223> OTHER INFORMATION: D-Pen  
51 <400> SEQUENCE: 2  
WOK 52 Tyr Xaa Gly Phe Cys Arg Pro Ala  
53 1 5  
56 <210> SEQ ID NO: 3  
57 <211> LENGTH: 6  
58 <212> TYPE: PRT  
59 <213> ORGANISM: Artificial Sequence  
61 <220> FEATURE:  
62 <223> OTHER INFORMATION: Description of Artificial Sequence: DPDPE-Phe  
64 <220> FEATURE:  
65 <221> NAME/KEY: MOD\_RES  
66 <222> LOCATION: (2)  
67 <223> OTHER INFORMATION: D-Pen  
69 <220> FEATURE:

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70 <221> NAME/KEY: MOD\_RES  
 71 <222> LOCATION: (5)  
 72 <223> OTHER INFORMATION: D-Pen  
 74 <400> SEQUENCE: 3  
 OK 75 Tyr Xaa Gly Phe Xaa Phe  
 76 1 5  
 79 <210> SEQ ID NO: 4  
 80 <211> LENGTH: 6  
 81 <212> TYPE: PRT  
 82 <213> ORGANISM: Artificial Sequence  
 84 <220> FEATURE:  
 85 <223> OTHER INFORMATION: Description of Artificial Sequence: DPLCE-Phe  
 87 <220> FEATURE:  
 88 <221> NAME/KEY: MOD\_RES  
 89 <222> LOCATION: (2)  
 90 <223> OTHER INFORMATION: D-Pen  
 92 <400> SEQUENCE: 4  
 W-OK 93 Tyr Xaa Gly Phe Cys Phe  
 94 1 5  
 97 <210> SEQ ID NO: 5  
 98 <211> LENGTH: 7  
 99 <212> TYPE: PRT  
 100 <213> ORGANISM: Artificial Sequence  
 102 <220> FEATURE:  
 103 <223> OTHER INFORMATION: Description of Artificial Sequence: DPDPE-Arg-Gly  
 105 <220> FEATURE:  
 106 <221> NAME/KEY: MOD\_RES  
 107 <222> LOCATION: (2)  
 108 <223> OTHER INFORMATION: D-Pen  
 110 <220> FEATURE:  
 111 <221> NAME/KEY: MOD\_RES  
 112 <222> LOCATION: (5)  
 113 <223> OTHER INFORMATION: D-Pen  
 115 <400> SEQUENCE: 5  
 OK 116 Tyr Xaa Gly Phe Xaa Arg Gly  
 117 1 5  
 120 <210> SEQ ID NO: 6  
 121 <211> LENGTH: 7  
 122 <212> TYPE: PRT  
 123 <213> ORGANISM: Artificial Sequence  
 125 <220> FEATURE:  
 126 <223> OTHER INFORMATION: Description of Artificial Sequence: DPLCE-Arg-Gly  
 128 <220> FEATURE:  
 129 <221> NAME/KEY: MOD\_RES  
 130 <222> LOCATION: (2)  
 131 <223> OTHER INFORMATION: D-Pen  
 133 <400> SEQUENCE: 6  
 W-OK 134 Tyr Xaa Gly Phe Cys Arg Gly  
 135 1 5

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Input Set : A:\Larsen.app  
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138 <210> SEQ ID NO: 7  
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 140 <212> TYPE: PRT  
 141 <213> ORGANISM: Artificial Sequence  
 143 <220> FEATURE:  
 144 <223> OTHER INFORMATION: Description of Artificial Sequence: DPDPE-Phe-Ala  
 146 <220> FEATURE:  
 147 <221> NAME/KEY: MOD\_RES  
 148 <222> LOCATION: (2)  
 149 <223> OTHER INFORMATION: D-Pen  
 151 <220> FEATURE:  
 152 <221> NAME/KEY: MOD\_RES  
 153 <222> LOCATION: (5)  
 154 <223> OTHER INFORMATION: D-Pen  
 156 <400> SEQUENCE: 7  
 w-OK 157 Tyr Xaa Gly Phe Xaa Phe Ala  
 158    1                      5  
 161 <210> SEQ ID NO: 8  
 162 <211> LENGTH: 15  
 163 <212> TYPE: PRT  
 164 <213> ORGANISM: Artificial Sequence  
 166 <220> FEATURE:  
 167 <223> OTHER INFORMATION: Description of Artificial Sequence: DSIP-(Lys-Glu)3  
 169 <400> SEQUENCE: 8  
 170 Trp Ala Gly Gly Asp Ala Ser Gly Glu Lys Glu Lys Glu Lys Glu  
 171    1                      5                      10                      15  
 174 <210> SEQ ID NO: 9  
 175 <211> LENGTH: 15  
 176 <212> TYPE: PRT  
 177 <213> ORGANISM: Artificial Sequence  
 179 <220> FEATURE:  
 180 <223> OTHER INFORMATION: Description of Artificial Sequence: DSIP-(Glu)6  
 182 <400> SEQUENCE: 9  
 183 Trp Ala Gly Gly Asp Ala Ser Gly Glu Glu Glu Glu Glu Glu  
 184    1                      5                      10                      15  
 187 <210> SEQ ID NO: 10  
 188 <211> LENGTH: 11  
 189 <212> TYPE: PRT  
 190 <213> ORGANISM: Artificial Sequence  
 192 <220> FEATURE:  
 193 <223> OTHER INFORMATION: Description of Artificial Sequence: Leu-enkephalin-(Glu)6  
 195 <400> SEQUENCE: 10  
 196 Tyr Gly Gly Phe Leu Glu Glu Glu Glu Glu Glu  
 197    1                      5                      10  
 200 <210> SEQ ID NO: 11  
 201 <211> LENGTH: 11  
 202 <212> TYPE: PRT  
 203 <213> ORGANISM: Artificial Sequence  
 205 <220> FEATURE:

177 117-1  
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Input Set : A:\Larsen.app

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206 <223> OTHER INFORMATION: Description of Artificial Sequence: Leu-enkephalin-(Lys)6  
 208 <400> SEQUENCE: 11  
 209 Tyr Gly Gly Phe Leu Lys Lys Lys Lys Lys  
 210 1 5 10  
 213 <210> SEQ ID NO: 12  
 214 <211> LENGTH: 5  
 215 <212> TYPE: PRT  
 216 <213> ORGANISM: Homo sapiens  
 218 <400> SEQUENCE: 12  
 219 Tyr Gly Gly Phe Leu  
 220 1 5  
 223 <210> SEQ ID NO: 13  
 224 <211> LENGTH: 9  
 225 <212> TYPE: PRT  
 226 <213> ORGANISM: Homo sapiens  
 228 <400> SEQUENCE: 13  
 229 Cys Tyr Ile Gln Asn Cys Pro Leu Gly  
 230 1 5  
 233 <210> SEQ ID NO: 14  
 234 <211> LENGTH: 14  
 235 <212> TYPE: PRT  
 236 <213> ORGANISM: Artificial Sequence  
 238 <220> FEATURE:  
 239 <223> OTHER INFORMATION: Description of Artificial Sequence: AF 12505  
 241 <400> SEQUENCE: 14  
 242 Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala  
 243 1 5 10  
 246 <210> SEQ ID NO: 15  
 247 <211> LENGTH: 14  
 248 <212> TYPE: PRT  
 249 <213> ORGANISM: Homo sapiens  
 251 <220> FEATURE:  
 252 <223> OTHER INFORMATION: insulin-like growth factor I (57-70)  
 254 <400> SEQUENCE: 15  
 255 Ala Leu Leu Glu Thr Tyr Cys Ala Thr Pro Ala Lys Ser Glu  
 256 1 5 10  
 259 <210> SEQ ID NO: 16  
 260 <211> LENGTH: 12  
 261 <212> TYPE: PRT  
 262 <213> ORGANISM: Homo sapiens  
 264 <220> FEATURE:  
 265 <223> OTHER INFORMATION: insulin-like growth factor I (30-41)  
 267 <400> SEQUENCE: 16  
 268 Gly Tyr Gly Ser Ser Arg Arg Ala Pro Gln Thr  
 269 1 5 10  
 272 <210> SEQ ID NO: 17  
 273 <211> LENGTH: 18  
 274 <212> TYPE: PRT  
 275 <213> ORGANISM: Homo sapiens

↓ PSI

**Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.**

## VERIFICATION SUMMARY

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Input Set : A:\Larsen.app

Output Set: N:\CRF3\05182000\I341590.raw

L:10 M:270 C: Current Application Number differs, Replaced Application Number  
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:34 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:52 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:75 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:93 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:116 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:134 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:157 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:347 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21  
L:448 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27  
L:466 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28  
L:487 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29  
L:530 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31  
L:553 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32  
L:587 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34  
L:615 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35  
L:720 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42  
L:764 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45  
L:795 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47  
L:813 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48  
L:873 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51  
L:956 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:57  
L:956 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:57  
L:956 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:57  
L:974 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:58  
L:974 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:58  
L:974 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:58  
L:992 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:59  
L:992 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:59  
L:992 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:59  
L:1010 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:60  
L:1010 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:60  
L:1010 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:60  
L:1028 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:61  
L:1028 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:61  
L:1028 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:61  
L:1059 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:63  
L:1059 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:63  
L:1059 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:63  
L:1077 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:64  
L:1077 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:64  
L:1077 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:64  
L:1095 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:65  
L:1095 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:65  
L:1095 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:65  
L:1113 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:66  
L:1113 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:66

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L:1113 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:66  
L:1131 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:67  
L:1131 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:67  
L:1131 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:67  
L:1149 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:68  
L:1149 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:68  
L:1149 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:68  
L:1167 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:69  
L:1167 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:69  
L:1167 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:69  
L:1185 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:70  
L:1185 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:70  
L:1185 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:70  
L:1203 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:71  
L:1203 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:71  
L:1203 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:71  
L:1221 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:72  
L:1221 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:72  
L:1221 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:72  
L:1239 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:73  
L:1239 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:73  
L:1239 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:73  
L:1257 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:74  
L:1257 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:74  
L:1257 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:74  
L:1275 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:75  
L:1275 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:75  
L:1275 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:75  
L:1293 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:76  
L:1293 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:76  
L:1293 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:76  
L:1311 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:77  
L:1311 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:77  
L:1311 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:77  
L:1329 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:78  
L:1329 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:78  
L:1329 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:78  
L:1347 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:79  
L:1347 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:79  
L:1347 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:79  
L:1365 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:80  
L:1365 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:80  
L:1365 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:80  
L:1383 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:81  
L:1383 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:81  
L:1383 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:81  
L:1401 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:82  
L:1401 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:82  
L:1401 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:82

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L:1419 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:83  
L:1595 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93  
L:1621 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94  
L:1624 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94  
L:1647 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95  
L:1650 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95  
L:1678 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96  
L:1737 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100  
L:1830 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:106  
L:1848 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:107  
L:1866 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:108  
L:1964 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:114  
L:1982 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:115